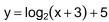
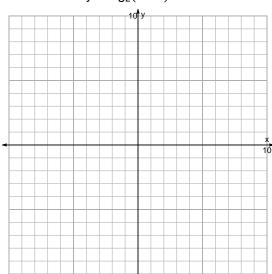
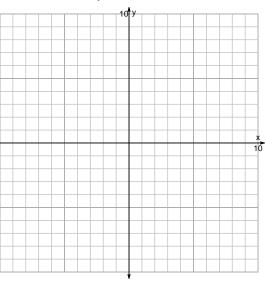
s18quiz: EXP LOG (Example v1)

1. Graph $y = \log_2(x+3) + 5$ and $y = 2^{x+3} + 5$ on the grids below. Also, draw any asymptotes with dotted lines.





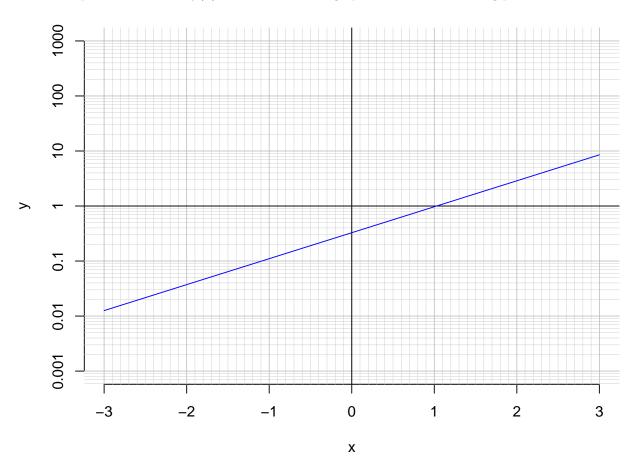
$$y = 2^{x+3} + 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$11 = \left(\frac{3}{7}\right) \cdot 2^{5t/4}$$

3. An exponential function $f(x) = 0.327 \cdot e^{1.09x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(0.7).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(0.03)$.